Instructions

GL-32® (Grease) and GL-43® (Oil) Injectors

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EN

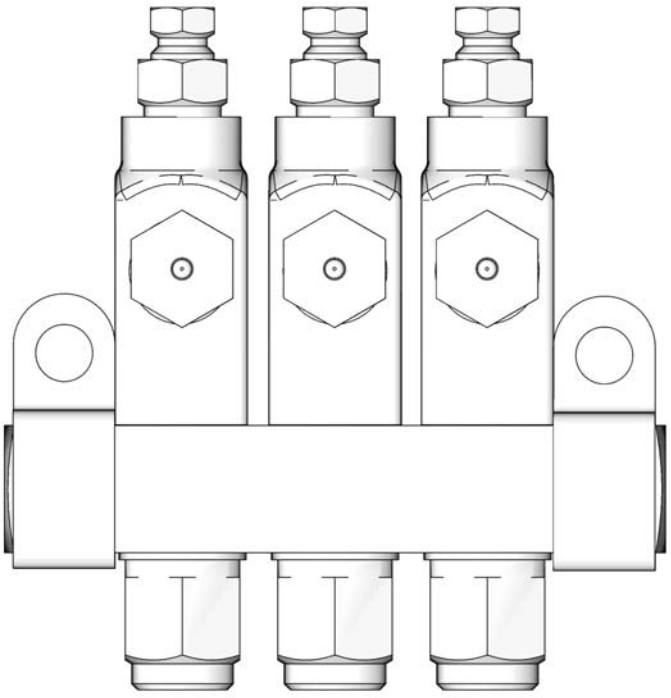
For Single-Line, Parallel, and Automatic Injector Systems Dispensing Grease, N.L.G.I. grades #000 - #2 and Oil (minimum SAE 10 weight).

Model Nos.:

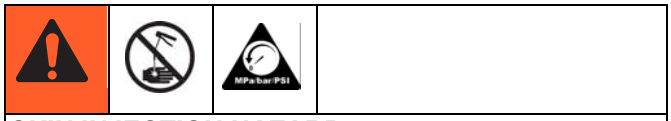
	GL-32 1/4 NPT	GL-32 1/8 BSPP	GL-32 SST 1/4 NPT	GL-32 SST 1/8 BSPP	GL-43 1/4 NPT	GL-43 1/8 BSPP
Stand-Alone	24A919	24F507	24E389	24F549	24E240	24F542
Replacement	24A920	24F508	24E390	24F550	24E245	24F543
1X Manifold	24A921	24F509	24E391	24F551	24E241	24F544
2X Manifold	24A922	24F510	24E392	24F552	24E242	24F545
3X Manifold	24A923	24F511	24E393	24F553	24E243	24F546
4X Manifold	24A924	24F512	24E394	24F554	24E244	24F548

3500 psi (24 MPa, 241 bar) Maximum Working Pressure - Grease Models
1000 psi (6.89 MPa, 68.9 bar) Maximum Working Pressure - Oil Models

Important Safety Instructions
Read all warnings and instructions in this manual. Save these instructions.



Warnings

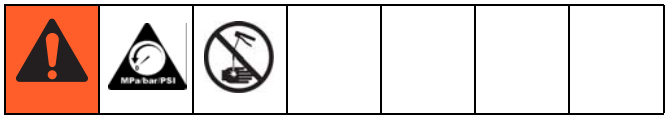


SKIN INJECTION HAZARD

High-pressure fluid from dispense valve, hose leaks, or ruptured components will pierce skin. This may look like just a cut, but it is a serious injury that can result in amputation. **Get immediate surgical treatment.**

- Do not point dispense valve at anyone or at any part of the body.
- Do not put your hand over the dispense nozzle.
- Do not stop or deflect leaks with your hand, body, glove, or rag.
- Follow **Pressure Relief Procedure** in this manual, when you stop dispensing and before cleaning, checking, or servicing equipment.

Pressure Relief Procedure



The equipment may be pressurized or may become pressurized by an automatic lubrication cycle initiated by a lubrication controller such as a timer. To avoid serious injury including the kind of injuries described in the Skin Injection Hazard warning:

1. Disconnect power to the timer.
2. If connected to an air supply, disconnect air supply to pump module to ensure the system is depressurized.
3. Consult your pump manual for any additional pressure relief instructions related to your pump module.

Adjustment Instructions

Reference numbers refer to parts (FIG. 1 and page 3).

1. Loosen lock nut (7).
2. Hand tighten the Adjuster Nut (8) then loosen, approximately 1/2 turn to achieve the minimum dispensed output volume (.001 $in.^3$).

   NOTE: Any output setting below 1/2 turn should be monitored to verify actual output volume.
3. Retracting the Adjuster Nut (8) five full turns from the hand-tight position permits a maximum dispensed output volume (.008 $in.^3$) This is the factory, preset position.

   NOTE:

   - Each full turn out represents an addition of approximately 0.0014 $in.^3$ volume output.
   - The amount of dispensed volume can vary depending on external conditions such as lubricant temperature and back pressure from the downstream connection.
4. When the injector has been adjusted for the proper lubricant output, wrench tighten the stroke adjustment lock nut (7).

NOTICE

To prevent component failure, the adjustment nut (8) must not be extended beyond the fully retracted position of the piston (6). See FIG. 1.

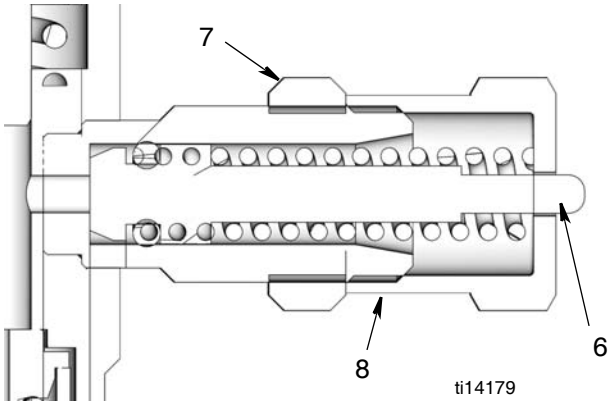
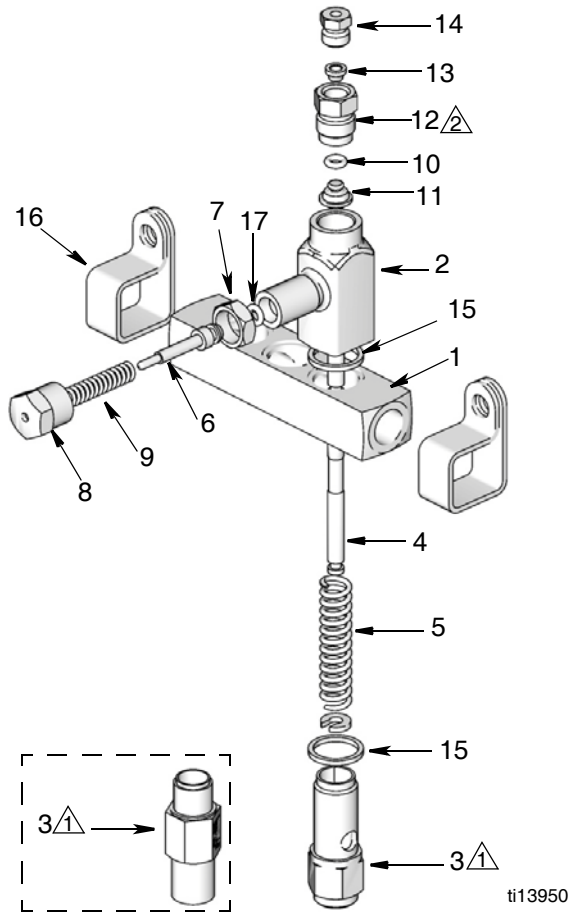


FIG. 1

Parts



1 Carbon Steel Models - Torque to 18-19 ft. lbs (24.4 - 25.7 N•m)

Stainless Steel Models - Torque to 23-26 ft. lbs (31.2-35.3 N•m)

2 Torque to 50-60 in. lbs (5.6 - 6.7 N•m)

Ref.	Part No.	Description	Qty
1	15W661	BLOCK, manifold, 1 injector , 1/4 NPT (model 24A921, 24E241)	1
	16M401	BLOCK, manifold, SST, 1 injector, 1/4 NPT (model 24E391)	1
	15W662	BLOCK, manifold, 2 injectors, 1/4 NPT (model 24A922, 24E242)	1
	16M402	BLOCK, manifold, SST, 2 injectors, 1/4 NPT (model 24E392)	1
	15W663	BLOCK, manifold, 3 injectors, 1/4 NPT (model 24A923, 24E243)	1
	16M403	BLOCK, manifold, SST, 3 injectors, 1/4 NPT (model 24E393)	1
	15W664	BLOCK, manifold, 4 injectors, 1/4 NPT (model 24A924, 24E244)	1
	16M404	BLOCK, manifold, SST, 4 injectors, 1/4 NPT (model 24E394)	1
	16F341	BLOCK, manifold, 1 injector, 1/8 BSPP (model 24F509, 24F544)	1
	16M405	BLOCK, manifold, SST, 1 injector, 1/8 BSPP (model 24F551)	1
	16F342	BLOCK, manifold, 2 injectors, 1/8 BSPP (model 24F510, 24F545)	1
	16M406	BLOCK, manifold, SST, 2 injectors, 1/8 BSPP (model 24F552)	1
	16F343	BLOCK, manifold, 3 injectors, 1/8 BSPP (model 24F511, 24F546)	1
	16M407	BLOCK, manifold, SST, 3 injectors, 1/8 BSPP (model 24F553)	1
	16F344	BLOCK, manifold, 4 injectors, 1/8 BSPP (model 24F512, 24F548)	1
	16M408	BLOCK, manifold, SST, 4 injectors, 1/8 BSPP (model 24F554)	1
2		HOUSING	1
3	15W671	CYLINDER, inlet, 1/4-18 NPTF, stand alone, (model 24A919)	1
	16D894	CYLINDER, inlet, 1/4-18 NPTF, SST, stand alone, (model 24E389, 24F549)	1
	16E027	CYLINDER, inlet, 1/4-18 NPTF, stand alone, oil (model 24E240)	
	15W657	CYLINDER, inlet, manifold (model 24A920-24A924; 24E241-24E245)	1
	124154	CYLINDER, inlet, SST, manifold (model 24E390-24E394; 24F550- 24F554)	1
4		PISTON, end	1
5★		SPRING, compression, piston	1
6		PISTON, stroke	1
7		NUT, lock, stroke adjustment	1
8		ADJUSTER, nut, stroke, piston	1
9★		SPRING, compression, piston	1
10★		O-RING, 006, duro viton	1
11★		VALVE, body, one-way	1
12❖†✓		ADAPTER, outlet	1
13❖†✓		FITTING, compression	1

Ref.	Part No.	Description	Qty
14❖†✓		ADAPTER, compression, nut	1
15★		SPACER, manifold inlet	2
16	15W658	CLIP, manifold (all non-SST models only, 24A921-24A924, 24F509-24F512; 24E241-24E244; 24F544, 24F545, 24F546, 24F548)	2
	124619	CLIP, SST, manifold (models, 24E391-24E394; 24F551-24F554)	
17	123962	SEAL, square, GL-Series	1

★ Parts included in Injector Repair Kit 24B360, Oil - 24F201; SST - 24F944
❖ Parts included in 1/8” Outlet Fitting Kit 24B677; SST - 24F943
† Parts included in 4 mm Outlet Fitting (Adapter) Kit 24F513; SST- 24F555
✓ Parts included in 6 mm Outlet Fitting Kit 24F514; SST- 24F556

Technical Data

Oil Models

Maximum Operating Pressure	1000 psi (6.89 MPa, 68.9 bar)
Minimum Operating Pressure	750 psi (5.17 MPa, 51.7 bar)
Suggested Operating Pressure	850 psi (5.86 MPa, 58.6 bar)
Reset Pressure	150 psi (1.03 MPa, 10.3 bar)
Output Volume per Cycle	adjustable: 0.001 - 0.008 $in.^3$ (0.016 - 0.131 cc)
Wetted Parts	carbon steel, stainless steel, copper, fluoroelastomer
Recommended Fluids	Minimum SAE 10 weight oil*

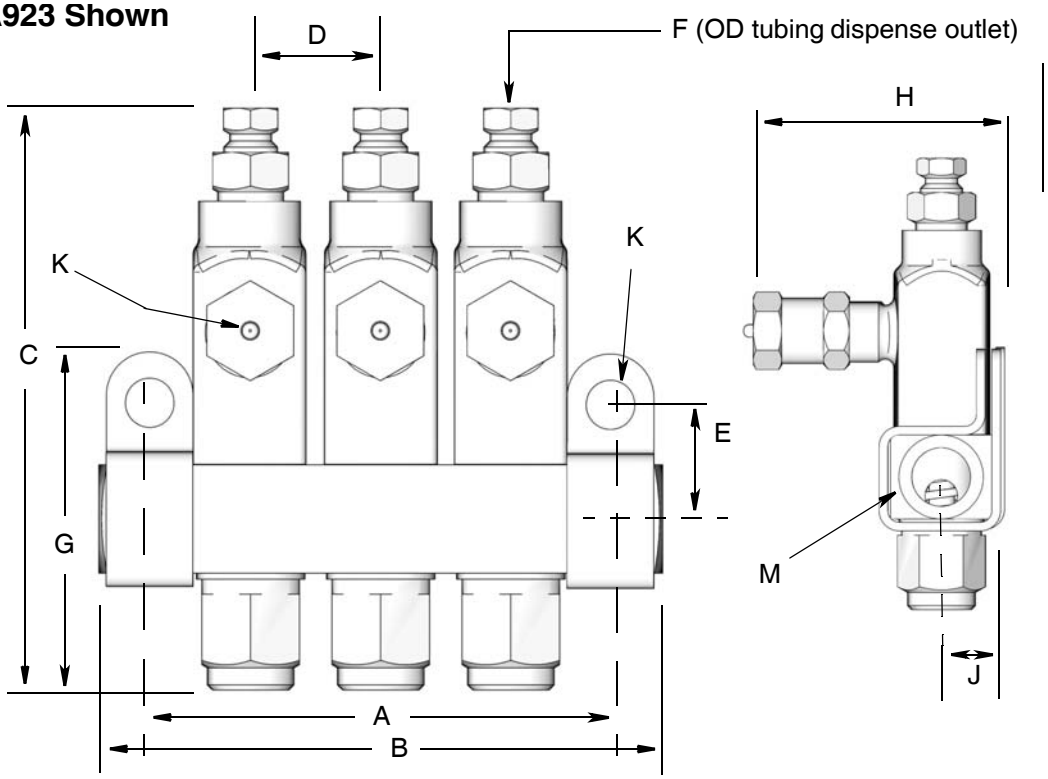
Grease Models

Maximum Operating Pressure	3500 psi (24 MPa, 241 bar)
Minimum Operating Pressure	1200 psi (8.3 MPa, 83 bar)
Suggested Operating Pressure	2500 psi (17 MPa, 172 bar)
Reset Pressure	200 psi (1.4 MPa, 14 bar)
Output Volume per Cycle	adjustable: 0.001 - 0.008 $in.^3$ (0.016 - 0.131 cc)
Wetted Parts	carbon steel, stainless steel, copper, fluoroelastomer
Recommended Fluids	Grease N.L.G.I. grades #000 - #2*

*Only use fluids appropriate for your application, automatic dispensing and the equipment’s operating temperature. Consult with machine and lube manufacturer for details.

Dimensions

Model 24A923 Shown



Injector	**A** in. / mm	**B** in./mm	**C** in./mm	**D** in./mm	**E** in./mm	**F†** in./mm	**G** in./mm	**H** in./mm	**J** in./mm	**K** in./mm	**M*** NPT or BSPP
Stand alone	single injector	manifold	3.12/ 79.4	N/A	0.68/ 17.3	0.125/ 3.2 OR 0.236/ 6.0	1.88/ 47.75	1.92/ 48.77	0.46/ 11.68	Ø 0.21/ 7.14	1/4" NPT or 1/8" BSPP
Manifold	replacement for manifold										
1 point manifold	1.14/ 28.9 CS	1.75/ 44.4 CS	3.12/ 79.4		0.68/ 17.3						
	1.14/ 28.9 SST	1.75/ 44.4 SST									
2 point manifold	1.90/ 48.26 CS	2.50 / 63.5 CS	3.12/ 79.4	0.75/ 19.0 CS	0.68/ 17.3						
	2.00/ 50.8 SST	2.60/ 66.0 SST		0.85/ 21.6 SST							
3 point manifold	2.64/ 67.06 CS	3.25/ 82.5 CS	3.12/ 79.4	0.75/ 19.0 CS	0.68/ 17.3						
	2.84/ 72.14 SST	3.45/ 87.6 SST		0.85/ 21.6 SST							
4 point manifold	3.39/ 86.11 CS	4.00/ 101.6 CS	3.12/ 79.4	0.75/ 19.0 CS	0.68/ 17.3						
	3.69/ 93.73 SST	4.30/ 109.2 SST		0.85/ 21.6 SST							

**To verify your injector's inlet / outlet thread type (M), see Model Nos. table provided on cover page of this manual.*
† 0.157/4.0 available as adapter kit.

Graco Standard Warranty

Graco warrants all equipment referenced in this document which is manufactured by Graco and bearing its name to be free from defects in material and workmanship on the date of sale to the original purchaser for use. With the exception of any special, extended, or limited warranty published by Graco, Graco will, for a period of twelve months from the date of sale, repair or replace any part of the equipment determined by Graco to be defective. This warranty applies only when the equipment is installed, operated and maintained in accordance with Graco's written recommendations.

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This warranty is conditioned upon the prepaid return of the equipment claimed to be defective to an authorized Graco distributor for verification of the claimed defect. If the claimed defect is verified, Graco will repair or replace free of charge any defective parts. The equipment will be returned to the original purchaser transportation prepaid. If inspection of the equipment does not disclose any defect in material or workmanship, repairs will be made at a reasonable charge, which charges may include the costs of parts, labor, and transportation.

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Original instructions. This manual contains English. MM 313798
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